PROJECT INSPECTOR CERTIFICATION AND APPROVAL

IR A-7

Reference: California Building Standards Administrative Code (Title 24, Part 1) Sections 4-211, 4-333, & 4-341 California Education Code, Sections 17309, 17311 & 81141 Revised 06-01-06 Revised 09-10-02 Issued 9-1-99

This Interpretation of Regulation (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA, which include State of California public elementary and secondary schools (grades K-12), community colleges, and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IR's. Only IR's listed in the document at http://www.dsa.dgs.ca.gov/Publications/default.htm (click on "DSA Interpretations of Regulations Manual") at the time of plan submittal to DSA are considered applicable.

Purpose: This IR describes the requirements for the certification and approval of school construction project inspectors. All project inspectors must complete this two-step process of certification and approval by DSA before they are permitted to work on school construction projects.

Section 1 of this IR explains the requirements for *DSA Certification* of project inspectors. Section 2 specifies the requirements for *DSA Approval* of the project inspector. Duties of Inspectors are described in DSA <u>IR A-8</u>. The acceptance and approval of assistant inspectors is described in DSA <u>IR A-12</u>.

Certification & Approval - a Two-Step Process

Certification is the first step in becoming a school construction project inspector. This step occurs only once. An inspector may become *DSA-Certified* by successfully completing the DSA Project Inspector Examination. There are four classes of certification. These classes correspond to a project class assigned to each project by DSA. See Section 1 below. Certification is only one of several factors involved in the approval process.

Approval is the second step. This step occurs on every project. Approval of the project inspector by the DSA Regional Office must be obtained before the inspector is permitted to work on a project. *DSA Approval* is based on several factors, one of which is DSA Certification in the proper class. See Section 2 below.

Section 1 - CERTIFICATION of the INSPECTOR

As required by law, all project inspectors must be certified through the DSA Project Inspector Examination Program.

Examinations are given in each of four project classes. The examinations measure the applicant's ability to read and comprehend construction plans and the California Building Standards Code.

The DSA Project Inspector Examination Program does **not** qualify an applicant as a "special" inspector.

The Class 1 Project and the Class 1 Examination

Projects that are designated as Class 1 must contain one or more "Class 1 structures" (as defined below) but may also contain Class 2, Class 3, or Class 4 structures. The Class 1 examination is comprehensive; it tests the applicant's knowledge of Class 1, Class 2, Class 3, and Class 4 structures and related code requirements.

Class 1 structures include:

- Buildings or additions of 2,000 square feet or greater that utilize materials other than wood-frame shear walls (masonry/concrete shear walls, steel brace frames, concrete, or steel moment-resisting frames) as the primary lateral-load resistive system.
- Substantial structural alterations to the gravity and/or lateral load-resisting system of the building types described above.

The Class 2 Project and the Class 2 Examination

Projects that are designated as Class 2 must contain one or more "Class 2 structures" (as defined below) but may also contain Class 3 or Class 4 structures. The Class 2 examination tests the applicant's knowledge of Class 2, Class 3, and Class 4 structures and related code requirements.

Class 2 structures include:

- Buildings or additions over 2,000 square feet in floor area that utilize wood-frame shear walls as the primary lateral load-resistive system. Projects may be single or multi-level, with no upper limit in floor area. The project may contain incidental masonry, concrete and/or structural steel construction (e.g. gravity load carrying columns and beams). Buildings may have isolated exceptions to the lateral load resistive system, such as a steel brace frame at one location in the structure.
- Buildings or additions of less than 2,000 square feet in floor area that have primary lateral load-resistive systems utilizing concrete, masonry or steel construction. A singlestory masonry building with a regular configuration (see C.B.C. Sec. 1629A.5.2), a floor area of less than 7,000 square feet, and a wood-frame roof structure may be considered to be a Class 2 structure.
- On-site construction of two-story modular buildings.
- Alteration, modernization, and reconstruction projects that exceed the limitations of the Class 3 scope of work, and do not include substantial alterations to structural systems of concrete, steel or masonry.
- Non-building structures that exceed the limitations of the Class 3 scope of work.

The Class 3 Project and the Class 3 Examination

Projects that are designated as Class 3 must contain one or more "Class 3 structures" (small buildings of wood-frame construction and/or modernization/alteration projects) but may also contain Class 4 structures. The Class 3 examination tests the applicant's knowledge of both Class 3 and Class 4 structures and related code requirements.

Class 3 structures include:

- Buildings or additions of wood frame, single-story construction, with conventional (spread footing) concrete foundations and a total floor area less than 2,000 square feet. Structures must utilize wood-frame shear walls as the primary lateral load-resistive system. The project may include isolated steel or concrete elements (e.g. steel or concrete columns).
- Structural alteration projects limited to wood-frame, single story construction. When
 deemed appropriate by DSA, alterations to (or addition of) isolated steel, masonry or
 concrete elements may be included in Class 3 projects. Alteration projects involving
 significant changes to the lateral load-resisting system may be classified as Class 2
 projects.

- Alteration and modernization projects that are primarily non-structural, such as electrical, mechanical, plumbing, disabled access features, and site improvement work.
- Non-building structures, such as signs and poles less than 35' in height, bleachers with a maximum of 5 rows of seats, walls less than 10' in height above grade, and single-story canopies less than 200 square feet in horizontal projected area.

The Class 4 Project and the Class 4 Examination

Projects that are designated as Class 4 only include "Class 4 structures" (building placement and related site work for premanufactured single-story relocatable buildings). The Class 4 examination tests the applicant's knowledge of Class 4 structures and related code requirements. Class 4 structures include only site installation of premanufactured, single-story relocatable buildings.

Relocatable Building Inspector - In Plant ("RBIP" Inspectors)

Inspectors of factory-built relocatable buildings must be certified through either the DSA RBIP examination or the Class 1 project inspector examination. The RBIP examination is scheduled through the DSA Headquarters Office (contact DSA Headquarters at 916/324-1282).

Expiration and Recertification

An inspector's certification expires four years from the date of issue. To renew the certification, each inspector must complete the requirements of the DSA Inspector Re-Certification Program every four years. The re-certification program consists of the DSA Academy Project Inspector Overview Class and a re-certification class conducted by DSA. Further information regarding the requirements of re-certification may be obtained on-line at www.dsa.dgs.ca.gov (click on "Inspector Program"). For information on the Project Inspector Overview Class, refer to www.dsa.dgs.ca.gov/academy.

For Specific Examination Information

The DSA Project Inspector Examination Program is administered by the DSA Headquarters office. For information regarding the examination schedule, locations, examination fees, or to obtain an application, contact DSA Headquarters, by phone at 916/324-1282, or on-line at www.dsa.dgs.ca.gov (click on "Inspector Program").

Section 2 - APPROVAL of the PROJECT INSPECTOR

As required by law, all project inspectors must be DSA approved for work on each individual project.

To apply for approval, the design professional in general responsible charge must submit an <u>Inspector's Qualification Record</u> form (<u>Form DSA-5</u>) to the appropriate DSA Regional Office at least ten days prior to the start of construction. The inspector must complete the form. The form must be signed by the inspector, the school district representative, the design professional in general responsible charge, and the structural engineer delegated responsibility for observation of construction.

For Approval on Class 1 and Class 2 projects: Before submitting a Form DSA-5 for Class 1 or Class 2 projects, the design professional in general responsible charge must consult the DSA field engineer assigned to the project by the DSA Regional Office. The design professional and the DSA field engineer must review the inspector's qualifications for the project with regard to DSA approval criteria (see *DSA Approval of the Project Inspector* on page 6 of this IR). The use of assistant inspectors must also be considered at this time (see DSA IR A-12).

Review of the Inspector's Qualifications by the School District and Responsible Design Professionals

The following five items must be reviewed by the design professional in general responsible charge, the structural engineer delegated responsibility for observation of construction, and the school district prior to submitting the Form DSA-5 to the DSA Regional Office for Inspector Approval:

1. The Class of the Inspector's Certification and the Project Class

The project inspector's DSA certificate number and class designation must be provided on the Form DSA-5. The project classification must also be provided on the Form DSA-5. The project's classification is determined by DSA during plan review, and is indicated on the *Notice of Progress* (issued during plan review) and the *Approval of Plans* notification (issued after approval of plans and specifications). Project inspectors with Class 1 certification may apply for DSA Approval to inspect any project. Project inspectors with Class 2 certification may apply for approval to inspect projects that are designated as Class 2, 3, or 4. Project inspectors with Class 3 certification may apply for approval to inspect projects that are designated as Class 3 or 4. Project inspectors with Class 4 certification may only apply for approval on Class 4 projects.

2. Inspector's Work Experience

DSA approval is contingent upon the inspector's experience in inspection or construction work on building project(s) of a type similar to that of the individual project for which the inspector is applying. The inspector must describe qualifying experience from three building construction projects on the Form DSA-5. Qualifying experience is defined by the types of duties performed and the types of projects on which those duties were performed.

Types of Duties: Prior job positions and responsibilities are the primary considerations of qualifying experience. The inspector's prior responsibilities for either inspection or construction should include experience with the trades that will be utilized on the project for which the inspector is applying. Job positions that may provide qualifying experience include:

- Project Inspector (providing continuous inspection of an entire project). Prior experience as a project inspector is required for Class 1 and large Class 2 projects.
- DSA-approved Assistant Inspector.
- General Contractor's Field Superintendent.
- Special Inspector or Construction Trade Foreman. These positions provide qualifying experience only in the specific trade(s) in which the individual worked.

Other job positions are unlikely to provide sufficient experience for approval by DSA as a project inspector.

Types of Projects: The types of projects that provide qualifying experience must be relevant to the type of project for which the inspector is applying. Project aspects (both for prior projects and the project for which the inspector is applying) that must be considered include:

- Materials of the Structural System (wood-frame, concrete, masonry, steel).
- Complexity of the Structural System (configuration of buildings, number of floors, unusual design features).

• Size (square footage of new construction, total construction cost).

3. On-Site Presence of the Project Inspector

Two important aspects must be considered:

- a. The inspector must be present on the job-site when there is construction activity. The inspector's schedule must allocate sufficient time to perform all required duties on the project for which the inspector is applying. The inspector must indicate on the Form DSA-5 whether presence on the job-site will be full-time (40 hours per week or more) or part-time (less than 40 hours per week). Large projects usually require a full-time commitment from the inspector.
- b. If the inspector has other work commitments concurrent with the project for which the inspector is applying, each school project, each non-school project, and/or other employment commitments must be described on the Form DSA-5. For each concurrent project the following information must be provided:
 - Project name and location
 - DSA Application Number (if school project)
 - Scope of the project (new construction, building size, number of buildings, construction cost)
 - Current status of project (% complete)

The responsible design professionals, the school district, and DSA must conclude that the inspector's schedule will allow for an adequate presence on the job-site. In the event that the school district, the responsible design professional(s), or DSA conclude that the inspector's schedule as described on the Form DSA-5 will not allow for sufficient presence on the job-site, the inspector will be afforded an opportunity to provide additional information for re-evaluation.

The inspector must obtain prior written approval from the school district, the responsible design professional(s), and DSA for any changes to the time commitment or workload from that indicated on the approved Form DSA-5.

4. School District and Design Professional's Interview of the Inspector

DSA recommends that the school district and the responsible design professional(s) conduct a personal interview with the inspector before signing the Form DSA-5. The following points should be considered:

- The inspector's knowledge of his/her role and responsibilities, job duties, and limits of authority.
- Characteristics of the inspector necessary to develop and maintain satisfactory working relationships. Such characteristics include effective communication skills, patience, determination, consistency and the ability to exercise sound judgment.
- Inspector's physical ability and stamina to inspect all construction and to maintain a responsive presence on the job.
- Inspector's knowledge of construction methods, building materials, material
 testing/special inspection procedures and building codes applicable to the project.
 The inspector must be able to read and readily comprehend the requirements of the
 project plans and specifications.

5. DSA Approval of the Project Inspector

The project inspector must be DSA approved for each individual project. The DSA field engineer's approval of the proposed inspector is based on the following criteria:

- The proper relationship between the class of the inspector's certification and the project's classification, as described in item number 1 on page 4.
- The inspector's work experience, as described in item number 2 on page 4.
- The inspector's workload and time commitment to the project, as described in item number 3 on page 5.
- The utilization of assistant inspector(s) as described in DSA IR A-12.
- Satisfactory DSA performance ratings on previous school construction projects (refer to DSA IR A-8).
- Verification that the inspector is employed by the school district.

If the inspector meets the requirements for approval, the DSA field engineer will sign the Form DSA-5, which indicates DSA approval. A copy of the signed Form DSA-5 will be promptly returned to the inspector and the design professional in general responsible charge. If DSA is unable to grant approval, the Form DSA-5 will be promptly returned to the design professional in general responsible charge, with documentation of the reason(s) why approval was not granted. The proposed inspector may be reconsidered for approval if these documented reasons are satisfactorily addressed on the resubmitted Form DSA-5.

6. Withdrawal of Approval and/or Certification

The DSA field engineer observes the project inspector's performance of code-prescribed duties during the course of construction. IR A-8 describes the required duties and responsibilities of the project inspector. Failure to perform duties as required may result in the withdrawal of approval and/or certification of the project inspector.

The DSA field engineer completes an <u>Inspector's Performance Rating</u> for the project inspector and for the assistant inspector at the final site visit (refer to IR A-8, Section 2). The performance rating is used by DSA as a basis for approval of the project inspector and the assistant inspector on future projects.